

Preliminary Results from the BLM's Western Rivers and Streams Assessment

Scott Miller, Sarah Judson, Jennifer Courtwright, Steven Paulsen, Anthony R. Olsen, Philip Kaufmann

The Bureau of Land Management (BLM), in collaboration with the U.S. Environmental Protection Agency, is conducting its first Western Rivers and Streams Assessment (WRSA), a survey of the condition of BLM streams and rivers throughout the contiguous western U.S. The WRSA will answer three central questions: 1. What percentage of BLM's streams and rivers are in good, fair or poor biological condition; 2. What is the linear extent of streams and rivers experiencing stressors such as nutrient, salinity and fine sediment loading; and 3. What is the risk posed by the observed stressors to biological condition?

West-wide, preliminary results from two out of three years of sampling suggest that 30% of BLM streams and rivers are in good, 23% in fair and 47% in poor biological condition, as measured by aquatic macroinvertebrates. The degree of biological departure varied geographically, with mountainous regions having greater proportions of stream kilometers in good condition and lowland, arid regions having a greater extent of poor condition. The most ubiquitous stressors were excessive salinity, nutrient loading and reduced levels of canopy cover and instream habitat complexity. These same stressors were associated with increased risk of macroinvertebrate biological condition being in poor condition.